

ABSTRACT

To meet the current trend in computer programming, a multi-programming-language compiler system is designed to include a compiler framework which creates a general environment in which to carry out compilation and language modules to encapsulate the details of various programming languages. Such a system makes it easy for tool vendors and end users to adapt to a world where computer programs are written in multiple languages. New language modules may be written that add support for new languages to the compiler framework. It may also be possible to extend existing language modules so that a variant on an existing language may be added to the compiler framework. Such a system may also be adapted to permit several different clients to access detailed language information from the compiler framework. These clients may include a standard command-line shell or a sophisticated multi-language integrated development environment. This description is not intended to be a complete description of, or limit the scope of, the invention. Other features, aspects, and objects of the invention can be obtained from a review of the specification, the figures, and the claims.